

Remarks/Arguments

Claims 1-17 are pending in the present application. A restriction requirement was issued by the Examiner to one of the following inventions under 35 U.S.C. § 121:

- I. Claims 1-13, drawn to a method of at least partially dehydrating the casing of co-extruded food product, classified in Class 426, Subclass 231.
- II. Claims 14-17, drawn to a device for at least partially dehydrating the casing of co-extruded food products, classified in Class 99, Subclass 516.

During a telephone conversation between the Examiner and Timothy J. Zarley on April 22, 2009, a provisional election was made without traverse to prosecute the invention of Group I, claims 1-13. Claims 14-17 have been withdrawn. Claims 1-13 were objected to because of informalities, and claims 6-9 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter. In response Applicant has amended claims 1-13 and believes the objections and rejections have been obviated. Claims 1-3 and 5-13 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Kobussen et al. (US Pat. No. 6,245,369) in view of Ricklefs et al. (US Pat. No. 5,632,153), Riordan (US Pat. No. 4,094,237), Barber et al. (US Pub. No. 2003/0183092), and Sanderson et al. (US Pat. No. 5,783,237). Claims 4-5 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over the above references and further in view of Roy "Activated Carbon Application in the Food and Pharmaceutical Industries", Garrido et al. "The Recycling of Table Olive Brine Using Ultrafiltration and Activated Carbon Adsorption" and <http://tristate.apogee.net/et/ewtwaca.asp>. Applicant

respectfully disagrees with the present rejection and offers the following argument in support of allowance.

Claim 1

Claim 1 is rejected under 35 U.S.C. § 103 as being unpatentable over Kobussen in view of Ricklefs, Riordan, Barber and Sanderson. Applicant cannot agree because each and every limitation of claim 1 is not taught individually or in combination by the prior art. Independent Claim 1 requires, in-part, "reconditioning the collected aqueous salt solution such that it comprises forced evaporation of water out of the salt solution." The prior art does not teach these limitations.

In the communication it is argued that Kobussen (US 6,245,369) discloses a method wherein sausage strands are coextruded using a brine shower system. However as indicated Kobussen is silent on reconditioning the collected brine prior to recirculating the brine through the system. (5/12/09 Office Action, Page 6).

The examiner further argues that Ricklefs (US 5,632,153) discloses cleaning brine by removing contaminants (column 1, line 59) in a food chilling recirculating system. In view of the applicant Ricklefs is clear in that there is no forced evaporation of water out of the brine disclosed in Ricklefs. Ricklefs explicitly states that the filtration unit is separating suspended solids *"without affecting the salinity of the brine"* (column 2, line 20; column 2, lines 39-40). In case it is desired to maintain a desired salinity of the brine Ricklefs suggests to *"add salt or brine of a different salinity"* as well as that *"salt is added if there is an addition of water to the brine .."* (column 4, lines 23 - 25).

Another aspect of the chilling of food products with the brine is that the volume of the brine in the system will diminish by "*adhesion of the brine to the meat product*" (column 5, lines 33 - 35). In view of the applicant there is no incentive for the skilled person to combine Kobussen (US 6,245,369) and Ricklefs (US 5,632,153) as dehydrating the casing of coextruded products is not an issue in Ricklefs. And even if Kobussen and Ricklefs were combined Ricklefs would suggest to "*add salt or brine of a different salinity*". The Ricklefs' teaching clearly leads away from the "*forced evaporation of water out of the salt solution*" as claimed in claim 1 of the present application. Forced evaporation normally requires higher temperatures of the brine while Ricklefs requires cooling the brine as it is used for cooling purposes. Also, forced evaporation requires more energy and complex dedicated equipment to realize while adding salt or brine of different salinity is far easier and requires simple equipment; thus there is as motivated no teaching in Ricklefs (US 5,632,153) for a skilled person faced with Kobussen (US 6,245,369) to arrive at the present invention.

The examiner furthermore argues that Riordan (US 4,094,237) discloses the treatment of overflow of brine used for multi-needle injection of bacon by purifying the overflow contaminated brine before recycling it for use in a curing process. This document was in view of the applicant correctly classified as an "A" document that is not considered to be of particular relevance during the preceding International phase. The reconditioning of the brine as disclosed by Riordan takes place by filtering, mixing with fresh brine and ultraviolet radiation. Riordan fails to disclose "*dehydrating the casing of co-extruded food products*" by "*supplying the aqueous salt*

solution to the exterior of the co-extruded food products". Riordan also lacks disclosure of "reconditioning by forced evaporation of water out of the salt solution".

Riordan is focused to *"bacteriological kill"* and the salinity problem that arises by *"dehydrating the casing of co-extruded food products"* is not present in the bacon curing of Riordan. There is no disclosure at all relating the reconditioning of the brine other than filtering and radiation let alone that the specific evaporation is not disclosed. If the skilled person would amend the salinity of the brine in a device for multi-needle injection of bacon (quod non) the skilled person would be suggested by Ricklefs (see above) to add salt or brine of a different salinity and not to evaporate the water partially out of the brine.

The examiner also argues that the Barber (US 2003/0183092) disclosure is of relevance in relation to the present application. Barber suggests to marinate food products, especially potato slices, in a brine bath so as to thoroughly wet the pieces. Again this document is silent on *"dehydrating the casing of co-extruded food products"* including the effect that the salinity of the brine will change (diminish) due to the dehydration effect. On page 2, paragraph [0009] is disclosed that care is taken not to *"affect the concentration of the chloride compound within the brine solution"*. In paragraph [0010] is stated that *"fresh brine solution is continuously added including a supply of the chloride compound to which water is added to form solution having a predetermined concentration of the chloride compound"*. In paragraph [0011] is stated that *"the brine concentration in the brine tank can be maintained by adding*

brine in solution, by the addition of dry salts, or by the combination thereof".

There is no disclosure at all relating the reconditioning of the brine by evaporation. If the skilled person would amend the salinity of the brine in a device for coextruding sausages according Kobussen he would not arrive at Barber. In the unlikely case that the skilled person would combine Kobussen and Barber the suggestion to control the salinity of the brine is to add brine in solution, to add dry salts, or a combination of these two and not to evaporate the water partially out of the brine.

Also the combination of Kobussen and Barber does not lead to the present invention.

US patent 5,783,237 in the name of Sanderson et al. is disclosing the recycling of salt solution in food processing, more specific cheese manufacturing. Also this document is focusing on the avoidance of microbiological contamination. A fully saturated salt solution is diluted while processing cheese curd, to recycle the salt solution it is filtered, water is evaporated to enhance the salt concentration and salt is added to regain a saturated salt solution that can be recycled.

Different from the present invention is that Sanderson requires a fully saturated salt solution and that the processing of cheese curd results in a voluminous permeate or salty whey. The problem here is how to handle the enormous volume multiplication from the fully saturated salt solution to a salty whey; this is done by two different actions: evaporation and the addition of salt. Sanderson's problem (the recycling of a large volume of liquid that is expanded in volume several times to result in limited volume of fully

saturated salt solution again) is not to be compared to the problem of reconditioning an aqueous salt solution that results from dehydrating the casing of co-extruded food products. Also no salt is added in the present invention after evaporation. Another difference is the actions taken to reconditioning a salt solution without coloration (e.g. blackening) of the resulting salt solution.

Now there is also no incentive to combine Kobussen with the Sanderson disclosure. Both relate to different types of processes resulting in complete different demand in process control.

In view of the above, none of Kobussen, Ricklefs, Riordan, Barber or Sanderson, individually or in combination teach each and every limitation of Applicant's independent claim 1. In addition there is motivation to combine Kobussen, Ricklefs, Riordan, Barber and Sanderson. Consequently, Applicant believe independent claim 1, and all claims which depend therefrom, is in proper form for allowance. Accordingly, Applicant respectfully requests allowance of all claims.

Dependent Claims:

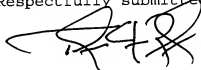
In view of the above, Applicant believes all claims are in proper form for allowance. Accordingly, Applicant respectfully requests allowance of all claims.

Conclusion

If any issues remain that may be expeditiously addressed in a telephone interview, the Examiner is encouraged to telephone the undersigned at 515/558-0200.

All fees or extensions of time believed to be due in connection with this response are attached hereto; however, consider this a request for any extension inadvertently omitted, and charge any additional fees to Deposit Account 50-2098.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'T. Zarley', with a stylized flourish at the end.

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